Unique Identification (UID) of Items

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DoD Vision for Item Marking

To implement a policy establishing a strategic imperative for uniquely identifying tangible items relying to the maximum extent practical on international standards and commercial item markings and while not imposing unique government data requirements.

Uniquely identified (UID) tangible items will facilitate item tracking in DoD business systems and provide reliable and accurate data for management, financial, accountability and asset management purposes.

UID Timeline

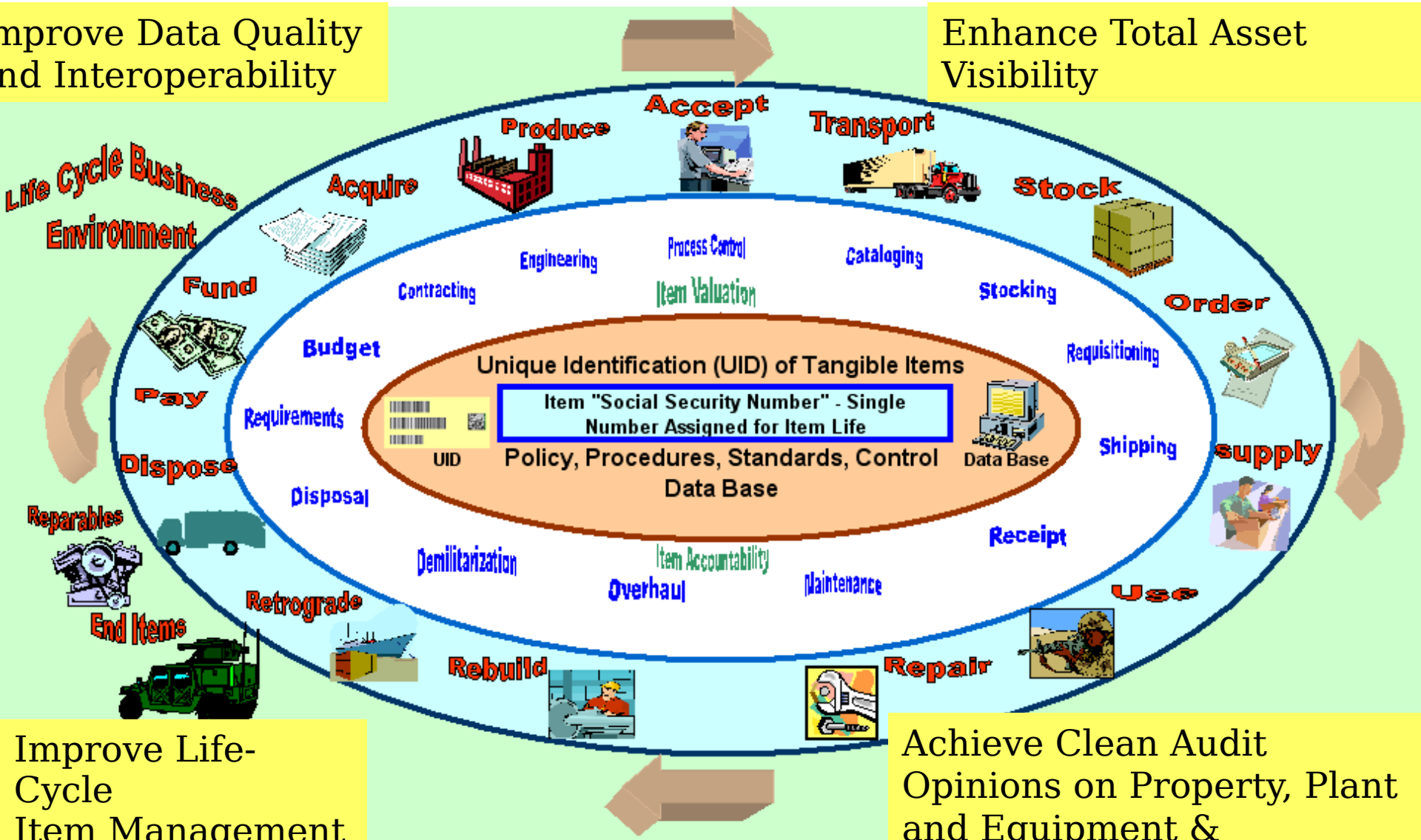
UID policy issued (effective 1 Jan 04)	29 Jul 03
DFARS Rule published in Federal Register	10 Oct 03
UID policy revision #1	26 Nov 03
UID policy revision #2	22 Dec 03
Comments closed on revision #2	1 Mar 04
Possible “migration plan” policy issued	mid-May 04
Final DFARS Rule	Jun 04
UID policy on marking in-service parts	Sep 04
UID requirements applicable to GFP	1 Jan 05

Meanwhile, UID policy continues to evolve…

UID Role - Business Enterprise Architecture

mprove Data Quality
nd Interoperability

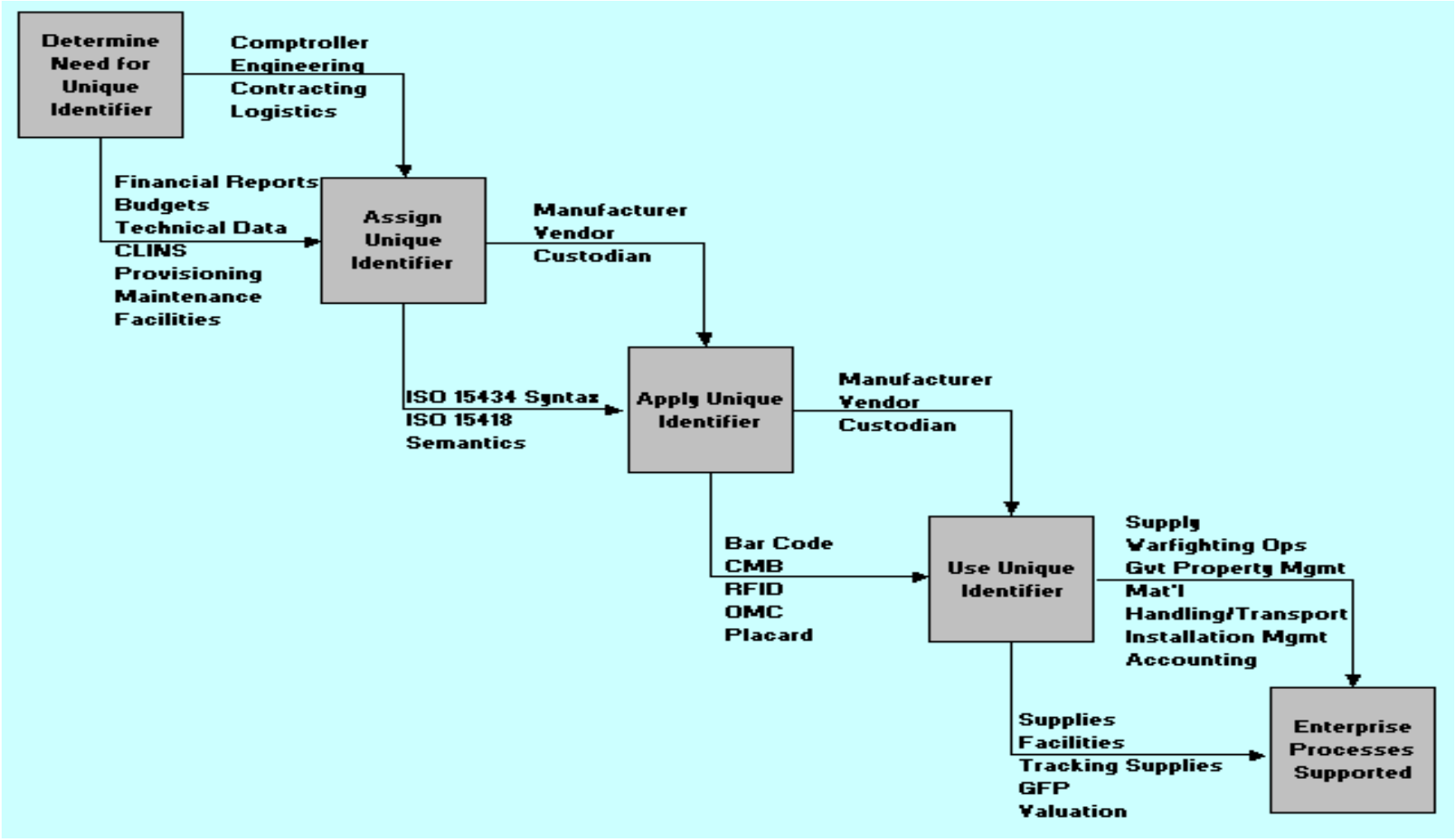
Enhance Total Asset Visibility



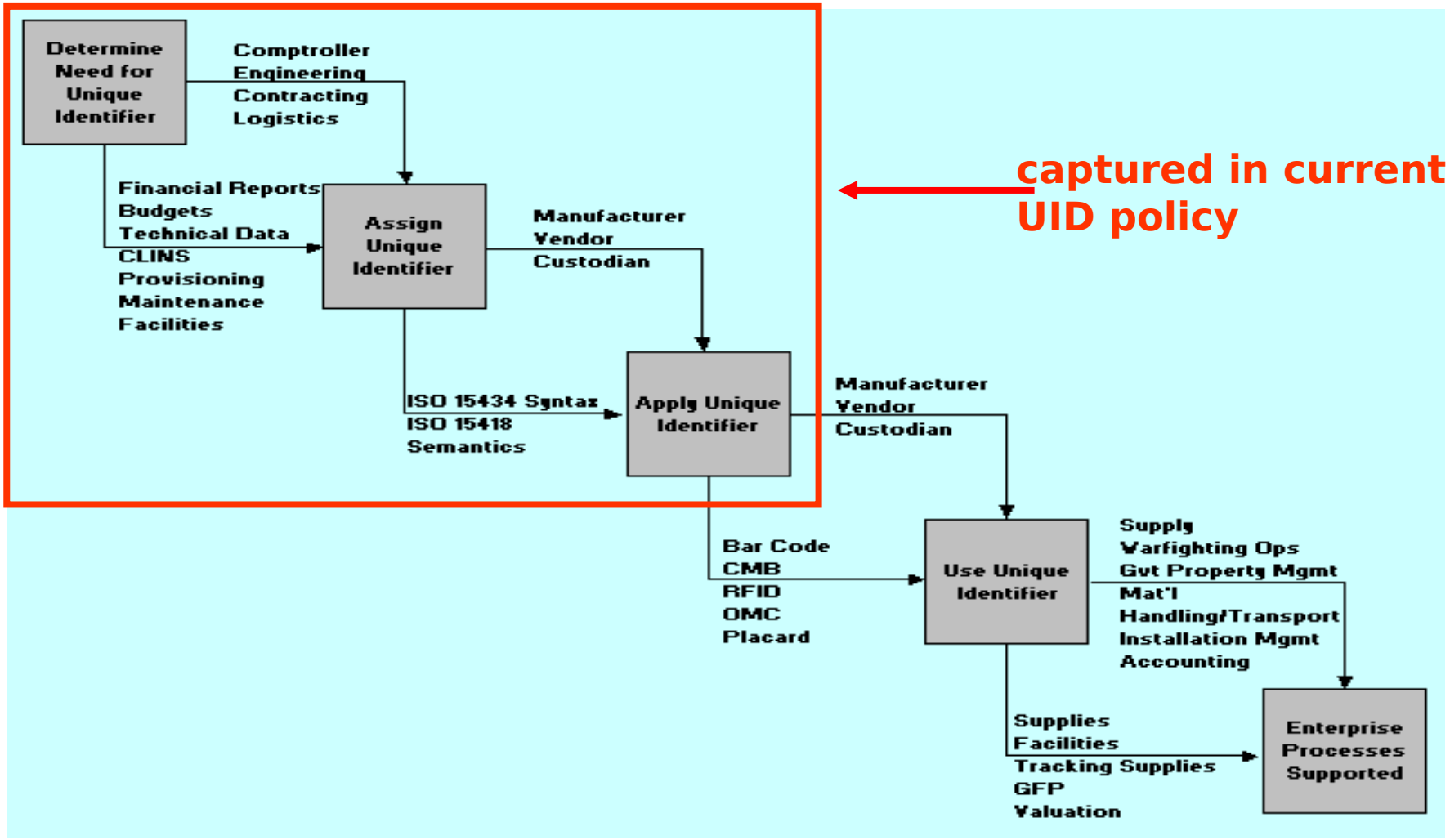
Improve Life-Cycle Item Management

Achieve Clean Audit Opinions on Property, Plant and Equipment &

UID Interface Flow



UID Interface Flow



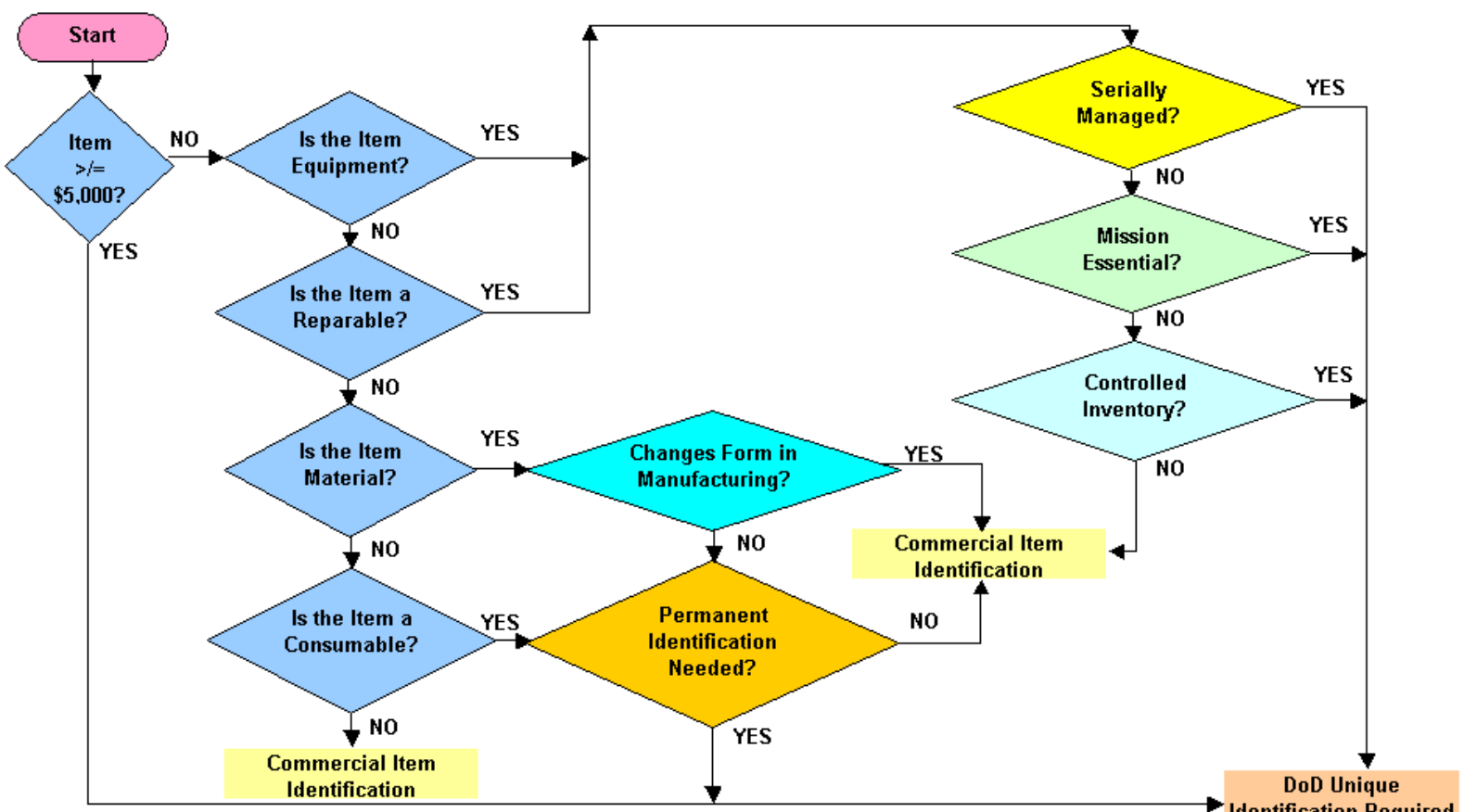
Requirement for UID

- All program managers for new equipment, major modifications, and reprocurements of equipment and spares shall plan to apply Unique Identification (UID) on tangible items
- UID is a mandatory DoD requirement for all solicitations issued on or after January 1, 2004
- Specific guidance related to UID requirements can be found by referring to the following sources:
  - DFARS interim rules issued 10 Oct 03 & 22 Dec 03
  - DoD Guide to UID Version 1.4
  - Coordinated Policy Guidance
  - www.acq.osd.mil/uid

Posted
20 Apr 04

What Requires UID?

Which Items Require a Unique Identifier



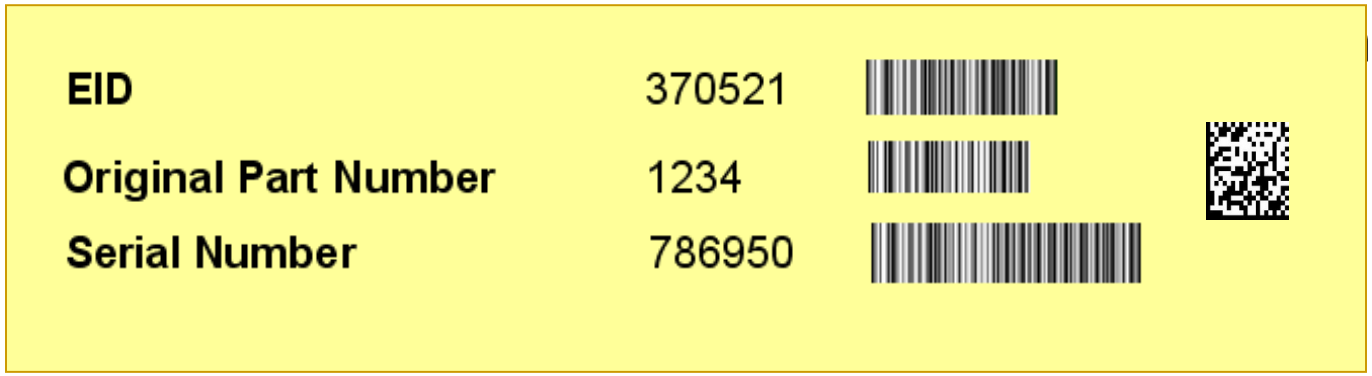
Commercial item identification examples are the Universal Product Code and Health Industry Bar Code

Unique **ID**entification **(UID)** is….

UID is . . .

. . . the set of data for tangible assets that is globally unique and unambiguous, ensures data integrity and data quality throughout life, and supports multi-faceted

nd



EID - Enterprise Identifier

UID NR = D3705211234786950

Create and Generate the UID

BUSINESS RULES

- The UID shall be derived from its discrete component data elements. The UID is not required to be marked on the item as a separate data element.*

UID Construct #1[1]

EID (MFR)0CVA5

Serial No. (SER)786950

UID Construct #1

D1 0CVA5786950

IAC CAGE Serial No.

UID Construct #2

EID (12V)194532636

Orig. Part No. (1P)1234

Serial No. (S)786950

UID Construct #2

UN194532636123478 6950

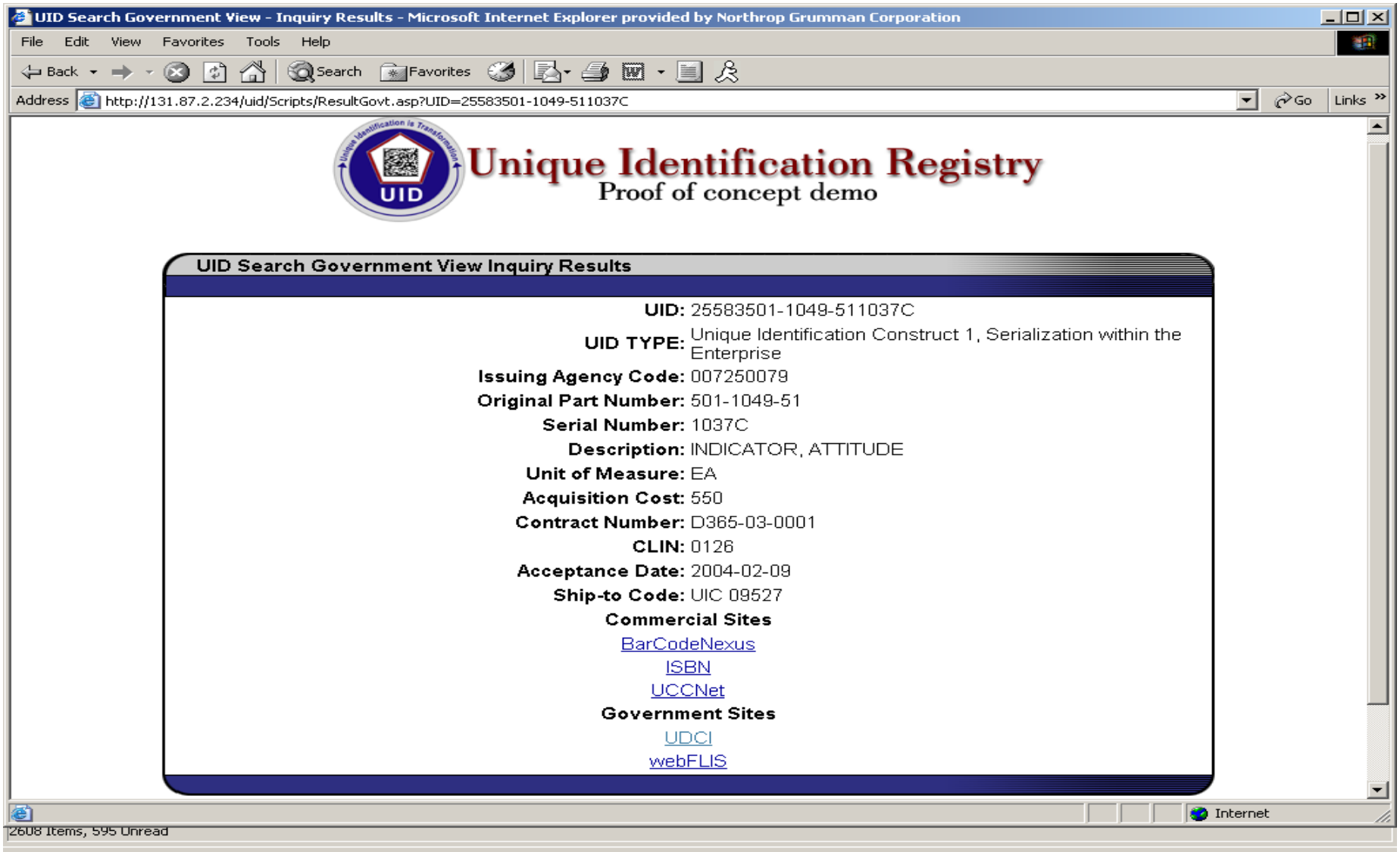
IAC DUNS Orig. Part No. Serial No.

[1] **This example uses Text Element Identifiers**

[2] **This example uses MH10.8.2 Data Identifiers.**

*If the enterprise chooses to mark the UID as a discrete data element on the item, the component data elements must also be marked on the item as discrete data elements, in addition to the UID.

UID Registry – Inquiry screen



UID Reporting in the Supply Chain

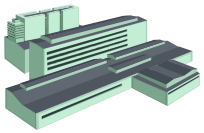
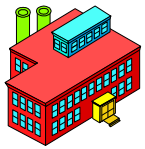
Product Data	Supply Chain	Unique Items	UID **
Enterprise			
Prime	PN 200H0028	Item Mark... EI 194532636 PN 200H0028 SN 003896*	UN194532636200H0028003896
End Item Specs			Delivery to Govt: End Item → List of Hardware UIDs (Optional)
Tier 1	PN 210H0611	Item Markings EI 040535536 PN 210H0611 SN 006392*	UN040535536210H0611006392
Subassembly Specs			Delivery to Govt: Spares → List of Hardware UIDs (Optional)
Tier 2	PN 216H1439	Item Markings EI 080907280 PN 216H1439 SN 020890*	UN080907280216H1439020890
Component Specs			Delivery to Govt: Spares → List of Hardware UIDs (Optional)
Tier 3	PN 218H2861	Item Markings EI 083949107 PN 218H2861 SN 105742*	UN083949107218H2861105742
Part Specs			Delivery to Govt: Spares

* Serialized within the part number using DUNS

**UN = Issuing Agency Code for DUNS

UID = Unique Identifier; EI = Enterprise Identifier
PN = Part Number; SN = Serial Number

UID Valuation in the Supply Chain

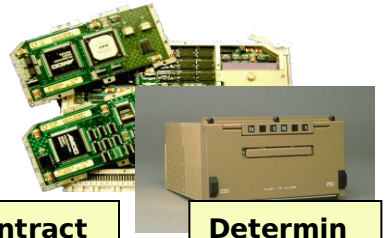
Supply Chain	Items Qualifying for UID		UID ** Deliverables
	Item Marking EI 194532636 PN 200H0028 SN 003896*	Delivery to Govt End Item	UN194532636200H0028003896 CLIN Valuation for end item
	Item Markings EI 040535536 PN 210H0611 SN 006392*	Delivery to Govt Spares	UN040535536210H0611006392 CLIN Valuation - if delivered as separate end item
	Item Markings EI 080907280 PN 216H1439 SN 020890*	Delivery to Govt Spares	UN080907280216H1439020890 CLIN Valuation - if delivered as separate end item
	Item Markings EI 083949107 PN 218H2861 SN 105742*	Delivery to Govt Spares	UN083949107218H28611057[illegible] CLIN Valuation - if delivered as separate end item

UID = Unique Identifier; EI = Enterprise Identifier
PN = Part Number; SN = Serial Number

*Serialized within the part number using DUNS

**UN = Issuing Agency Code for DUNS

UID Vendor Perspective



Contract Award

Determine what items need to be marked

Determine mark method and location

Create MBOM and MPP

Make Item

Functional Inspect

Buy Item

Subcontract SOW with UID Requirements

Receive Inspect & Store

Retrieve from Stock

Record UID, Integrate into end Product

Mark Item, Capture UID(s)

Record UID Data Delivery Requirements

Final Inspection

Ship, DD250

MBOM – Manufacturing Bill Of Materials
MPP – Manufacturing Process Planning

UID Effects on Acquisition

- New subject for all acquisition personnel – UID is not “a contracting initiative”
- New solicitation provision and contract clause (DFARS 252.211-7003, 1 Jan 04)
- Delayed impact on existing GFP until 1 Jan 05
- Potential CLIN/SubCLIN Issue (DFARS 204.7104)
- New data collection and payment system (Wide Area Work Flow, mandatory on 1 Jan 05)

Current UID Activity

- Two interim rules published so far
  - Final rule expected in Jun 04
  - Further interim guidance possible before final rule is issued
- OSD guidance continues to emerge
  - OSD Paper on UID Contracting Information – outdated; under review for possible recall
  - Version 1.4 of DoD Guide to UID published on 20 Apr 04
- Expect further policy guidance to emerge as DoD working groups continue to work issues
  - OSD working with ATA and ISO towards collaborative solution
  - OSD program office has shown honest interest in what we think
- Implementation plan for depot manufactured items

Some UID Issues

- Overall, cost of UID is still an unknown
  - Cost of changing drawings, tech orders, work specifications
  - Costs to develop data system interfaces for end item tracking
  - Material support costs associated with shipping, storage, disposal
- Judgment criteria to add UID to existing contract(s)
- Marking component parts within an end item
- Possible “Requirements Creep” into FAR Part 12 buys
- Implementation on repair contracts still unclear
- UID implementation plan requirement
  - OSD (Mr. Wynne) looking for plan during program reviews
  - OSD was supposed to provide template in mid-March

AF Depot-Manufactured Items

- Initial tasking was to assess UID impact on depot-manufactured items
  - Estimated 2023 parts manufactured in FY03 that > $5K threshold
  - 776 unique part numbers
  - Cost of UID not yet programmed into depot rates
- Services tasked to develop implementation plans for depot-manufactured items
- Draft plan developed and sent to depots for comment on 2 Apr; revised draft out for comment on 21 Apr
- Final plan expected to be released in May 04

UID Outcomes “Down the Road”

- Comprehensive, timely data about each uniquely identified item throughout the supply chain
  - Generation, collection and analysis of maintenance data
  - End-to-end tracking and traceability of unique items
  - Reliability and maintainability information on each item throughout its life cycle
- Improved supply chain efficiency
  - Administrative cost reduction
  - Reduced stock levels
  - Simplicity, standardization, speed and certainty in automated data capture and electronic information exchange
- Integrated transportation and movement of individually identified items
- Leveraged commercial technologies and practices

AFMC UID Points of Contact

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Questions?

Backups

Key DoD & External UID Stakeholders

DoD Stakeholders

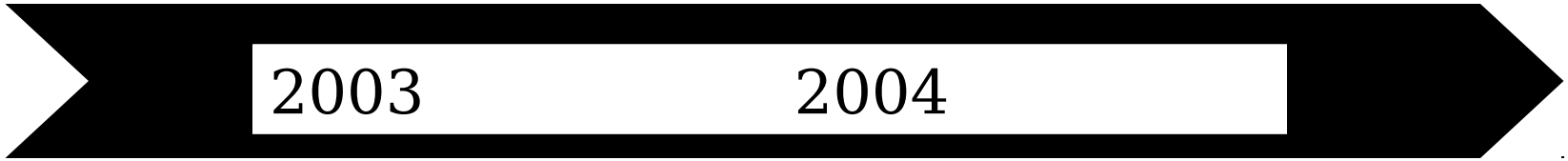
- Office Secretary of Defense
- All Services
- Joint Staff
- Defense Contract Management Agency
- Defense Logistics Information Service
- UK MoD

UID background materials and actions items are available
www.acq.osd.mil/uid

Industry Stakeholders

- Aerospace Industries Association (AIA)
- Government Electronics Association (GEIA)
- Uniform Code Council (UCC)
- Air Transport Association (ATA)
- Various AIT suppliers
- New York City Transit Authority
- UK Council for Electronic Business

Wide Area Work Flow (WAWF) Expected Timeline



OCT	NOV	DEC	JAN	FEB	MAR	APR
Requirements Defined	Design Solution	Development	Development	Unit Test	Integration	Dry Run
	Engage Vendors			Point-to-Point Test	End-to-End Test	IOC
	WAWF DEBX	WAWF DEBX Repository	WAWF DEBX Repository	WAWF DEBX Repository		

UID Collaborative Solution Issue

- Using the syntax of ISO/IEC 15434, the collaborative solution provides for three interoperable formats:

Formats:

(2-digit numeric format code requested of SC 31 to replace DD)

Text Element Identifiers:

[)>[RS]*DD*[GS]MFR 0CVA5[GS]SER 674A36458[RS][EOT]

EAN.UCC: Application Identifiers

[)>[RS]05[GS]800406141411A0B9C3D6[RS][EOT]

MH 10.8.2: Data Identifiers

[)>[RS]06[GS]17V0CVA5[GS]1P1234[GS]S786950[RS][EOT]

EID	(17V)0CVA5
Original Part Number	(1P)1234
Serial Number	(S)786950

- Until SC 31 assigns a format code for use of TEIs use interim DoD format code “DD” in ISO/IEC 15434 syntax

UID Policy Implementation Timeline

Policy

- UID policy issued (implementation effective Jan 2004) - 29 Jul 03
- UID policy revision #1 - 26 Nov 03
- UID policy revision #2 - 22 Dec 03
- (Anticipated) UID policy revision #3 - Apr/May 04
- UID policy on in-service parts - Sep 04
- UID implementation for existing GFP - 1 Jan 05

DFAR Cases

- DFARS Rule published in Federal Register - 10 Oct 03
- Comments due on DFARS Rule - 10 Nov 03
- Revised DFARS Rule published in Federal Register - 30 Dec 03
- Comments due on revised DFARS Rule - 1 Mar 04
- Final Rule - Jun 04

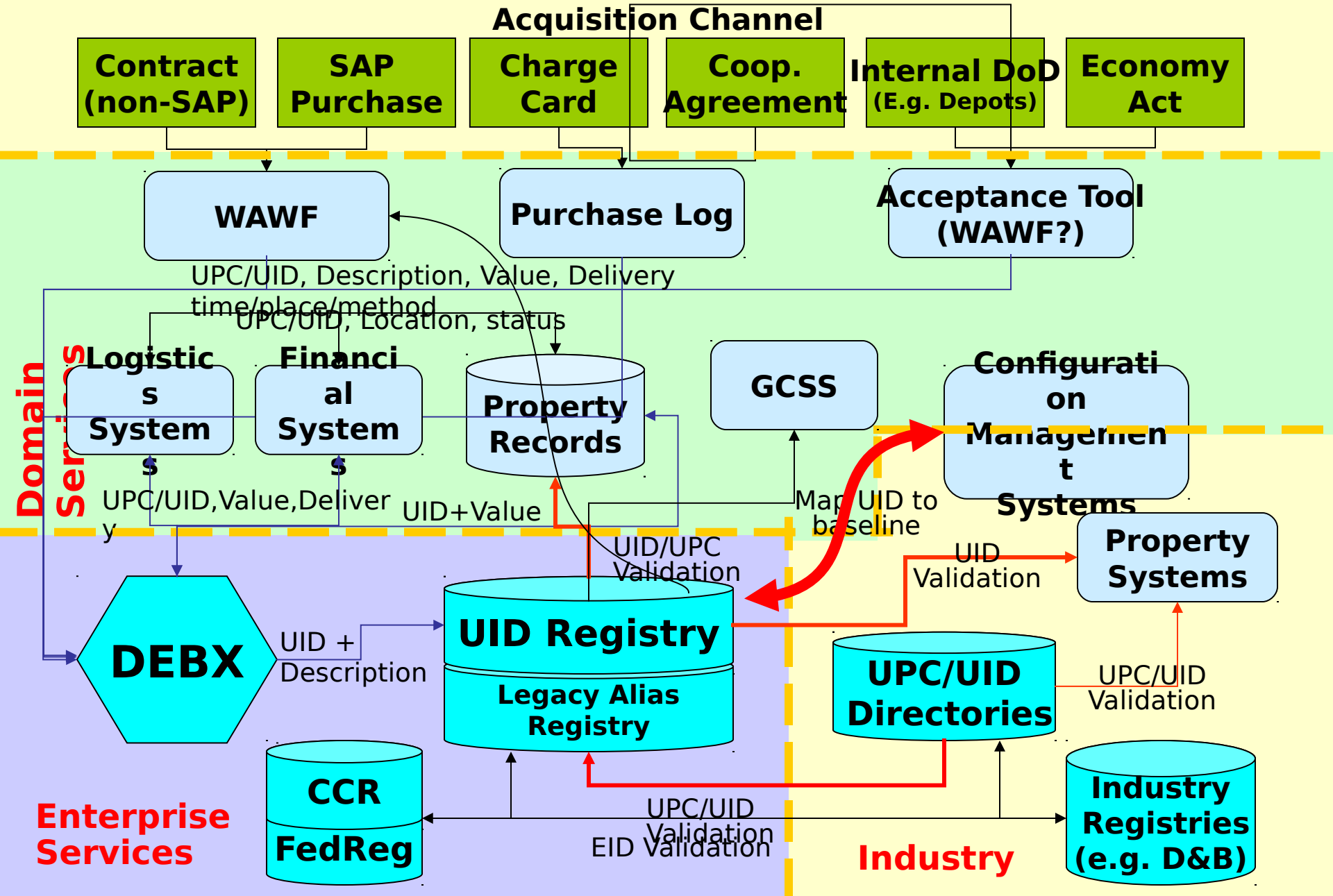
ISO 15434 Change Request

- Finalize “New Work Item Proposal” - Nov 03
- Gather change request support - ongoing
- ISO 15434 amendment decision - Jun 05

WAWF Modifications

- UID Capability IOC - Apr 04

UID Data Capture and Reuse



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